C.-OFFICERS OF VESSELS; DISCIPLINE OF THE CREW; NAVIGATION.

47. OFFICERS AND DISCIPLINE ON FISHING AND WHALING VESSELS.

THE SKIPPER AND HIS DUTIES .- The fishing vessels of New England have practically only a single officer, the "master" or "skipper," familiarly known to the crew as the "old man." On some Cape Cod vessels, and also on some from the coast of Maine, one of the crew is known as the "first hand," and is recognized as the person left in charge during the captain's absence, though he otherwise has no authority. The skipper has the entire responsibility of the management of the vessel, and has absolute control of her movements. In the Gloucester fleet, and, with the exception already mentioned, all along the coast, the crew are on a footing of absolute equality, and, in case of accident to the skipper, some one is selected by common consent to take command during the remainder of the voyage. The skipper has no authority except that which his personal influence gives him and the deference which men accustomed to control instinctively command. He must be a natural leader, and generally gifted with superior intellect and tact, in order to get along with the crew, there being no special laws like those in the marine service, which give him authority over his men. In cases of insubordination he must have recourse to his physical strength. If he cannot sustain himself in this manner, his influence over the crew is gone. There have been many instances of vessels, commanded by the most skillful skippers of Gloucester, having been compelled to return home without completing their trip on account of insubordination, which the skipper could not overcome. Skippers naturally hesitate to come into personal conflict with their men, because by so doing they render themselves liable to arrest for assault and battery. The skipper is in every respect on an equality with the members of his crew, except when he is directing them in some kind of work, and the commands are usually given more in the form of a request than of an order. The cabin in which the captain sleeps and lives is shared by the crew, a part of whom sleep there, while all of them are at liberty to use it as a sitting room when they choose; the skipper and the entire erew eat together in the forecastle.

DISCIPLINE.—An excellent idea of the discipline on the Grand Bank cod vessels is given by the observations made by Mr. Osborne, in another part of this report.

On the whaling ships a strict system of organization is maintained similar to that in the merchant marine, except that it is even more formal and severe. The captain and his officers are secluded from the rest of the crew, occupying another part of the ship and eating by themselves. The captain has absolute control over his men, and is assisted in maintaining this control by his officers, of whom there are always from five to seven. The manner in which the whale ships are officered will be described elsewhere. On the sealers a similar system of discipline is kept up, though it is less formal, the vessels being smaller and the crew, since they are picked men and usually of American birth, are naturally more upon terms of equality.

It is easy to understand how the present system of officering the fishing vessels has grown up. The fisheries have grown in importance and the vessels have increased in size, while the customs of previous centuries have remained unchanged. Men who were neighbors on land and were engaged in the shore fisheries together would have no need of special officers or of special systems of

discipline. They fished on terms of perfect equality, and frequently any one of them was equally competent to take charge of the vessel in case of necessity. It is probable that in the early days of the New England fisheries vessels were often fitted out for the fisheries without the form of selecting any one to take charge. This, of course, could be the case only with very small vessels. As vessels increased in size, it became necessary for some one to be designated as the leader, but since it was usually the case that many or all of the crew owned shares in the vessel the position was not one of undivided responsibility. The position of master was often kept up simply to fulfill the requirements of the law, and the person occupying the position had no more actual authority than any other man on board. Traces of the old manner of doing things may still be found on vessels from some of the smaller New England ports. The Swampscott vessels, for instance, are to the present day usually owned by several members of the crew, and the master holds his position more as a matter of form and honor than on account of any particular responsibility which he assumes. Sometimes each member of the crew owns a share in the vessel in which he ships. Many of the Cape Cod vessels are managed in very much the same way. The captain always has associated with him two or three "sharesmen" who are members of the crew. These men usually own a part of the vessel or, at least, assume a part of the responsibility of fitting her out with stores and apparatus for a voyage. If they are not possessed of sufficient capital to assume this position on their own responsibility, they are supplied with capital by the actual fitter of the vessel, and the position is maintained in a fictitious manner. The "sharesmen" are, as a rule, unable to advance the money, and they are consequently obliged to obtain the fittings on credit from the capitalists or "owner," who undertakes the financial responsibility of the voyage.

In Gloncester and other large ports the influence of the old traditions is seen in the condition of the discipline on the fishing vessels. The members of the crew seldom have any pecuniary interest in the success of the voyage, other than their share from the sales of the fish. The majority of the skippers likewise are not directly interested in the vessel which they command, except so far as their share and percentage on the stock are concerned.

The fishermen have so little responsibility and interest in the vessel that they are accustomed to leave her whenever they choose. Some of the fishermen seldem make two trips on the same vessel, and it is not uncommon for parts of the crew to abandon their vessel when she is on the point of leaving port on a fishing voyage, even after the sails have been spread for departure. The success of fishing trips is occasionally materially injured by members of the crew leaving a vessel when she is obliged to touch at other ports during the progress of her voyage. The crew, under such circumstances, have the master of the vessel very much at their mercy, for it is against the law of the United States for a vessel to leave any of the crew ashore in a foreign port until they have been absent more than twenty four hours, and they cannot therefore be considered as deserters. The master has but a limited power to compel his crew to remain on board, and they sometimes take advantage of this fact by going ashore at will, saying that if the master leaves them on shore he is liable to the penalty of the law.

The character of the master's authority has been already explained, but he is not supported in this by law. His only legal hold upon the movements of the men, when the vessel is at anchor in the harbor, is his power over the boats belonging to the vessel. These are the property of the owners and in his charge, and men taking them without leave may be prosecuted for stealing. About the year 1877 Capt. Dennis Murphy was prosecuted for damages by two of his crew, whom he had left ashore at Liverpool, Nova Scotia. They were not successful in their suit; the captain proved that they had taken one of the vessel's dories without leave and were therefore guilty of

theft. Notwithstanding the fact that they were unsuccessful, the suit cost the captain a large sum, probably more than his profits for the entire voyage, in addition to his loss of time.

Such instances of disobedience as the one referred to above are most liable to occur during the absence of the master from the vessel. He is, of course, obliged to attend to business upon the land, and, since he has no one on board to whom he can delegate his authority, the vessel is left without authority to enforce discipline.

The crew are supposed to sign shipping papers when they join the vessel, though many masters ship their crews without any formality whatever. These shipping papers, when signed, usually attach some penalty to absence from duty without leave, but the utmost penalty that can be inflicted is one which, within the memory of man, has never been enforced—that the fisherman's share in the proceeds of the trip shall be forfeited.

In cases where the American consuls at foreign ports have been appealed to for assistance in controlling an unruly crew, they have stated plainly that they had no authority in the matter. The difference in this respect between the fishing and whaling vessels is too evident to require comment. A severer system of discipline is needful no less at sea than on shore. Many of the fishing vessels are absent from two to six months, with crews of from ten to twenty-five men. It cannot be otherwise than that frequent necessity should arise for the exercise of authority to quell insubordination and to enforce proper attention to duty.

It is evident, from a consideration of the above facts, that there is need of a reform in the methods of officering the fishing vessels of the United States and maintaining discipline on board of them. On the smaller vessels the demand for a change of this sort may not be so strenuous, but even in these a different system of organization could result in no harm.

NEEDFUL REFORMS.—In the opinion of many of the most experienced fishing masters and fishery capitalists of Gloncester and other ports, the following changes would seem to be extremely desirable:

- (1) More care in the selection of masters of fishing vessels. They should not only be required to pass an examination in seamanship and navigation, their proficiency to be attested and signed by a board of examiners, as in the case of the merchant marine, but they should be selected with reference to their good judgment, prudence, and humanity. Mere ability to obtain good "fares" of fish by some sort of haphazard luck should not be regarded as a sufficient recommendation for a man to whom are to be intrusted the lives of a number of men, and property worth several thousand dollars. The skippers of Gloucester vessels are frequently selected for no other reason than because they are supposed to have good luck, or, as the fishermen express it, because they are "killers." Luck of this sort is, of course, but little to be relied upon, and in the long run such men are perhaps less successful than their rivals who are skillful and observant.
- (2) Since the needs of the fishing vessels are at the present day not very different from those employed in the the whaling and merchant marine, it seems evident that there should be more than one officer. There should be a mate, or first officer, who should share the responsibilities of the captain. He should have anthority in the absence of the captain, and in case of accident to the latter should at once take charge of the vessel. This man should, of course, be subject to examination, like the captain, or, at any rate, should give evidence to the proper persons of his ability to perform the duties of his office. The creation of a grade of subordinate officers among the fishermen would undoubtedly have a good effect upon the whole body of men engaged in the pursuit. The number of responsible positions would be doubled, and the responsibility placed upon these men would render them more sedate and reliable. They would be recognized as in the line of promotion, and their efforts to improve themselves would be greatly stimulated. The advantage to the fishery

capitalists also would be very great, since they would be able to supply vacancies in the list of skippers from men who had been systematically trained for the position, instead of being obliged to select untried men at random from among the crews. At present the only means by which the owner can select a skipper for one of his vessels is upon the recommendation of some other skipper with whom he has sailed, and every one knows how little value such recommendations ordinarily possess.

- (3) The enactment or the confirmation of laws by which the relations between the crew, the skipper, and the owners shall be clearly defined. It is the common belief that the same laws apply to the fishing vessels that are in force with respect to merchant vessels. Even if this be the case, the question of law is but little considered by the fishermen in the discipline on board of a fishing vessel. The officers should be supported in the necessary measures which they may take to quell insubordination or mutiny and to prevent disorderly conduct, the same rights being recognized as in the case of merchant vessels. The crews should be obliged to sign shipping papers in regular form, and these papers should be regarded as legal contracts, and means for their enforcement should be provided; this, too, without the necessity of protracted and expensive law suits. American consuls in foreign ports should be instructed to aid the masters of vessels in controlling disorderly men. Such a provision as the last one would have an important effect in controlling the acts of crews in provincial ports. It is now possible for two or three of the crew, by drunkenness and disorder, to neutralize the well-meant efforts of all their associates and prevent the success of the voyage.
- (4) The investment of the officers of the vessel with a greater amount of dignity. It is, of course, impossible on board a fishing vessel to maintain the same kind of exclusiveness which prevails on a merchant vessel or a whaler. The number of officers is less, and the nature of the employment prevents all ceremony. At the same time it is within the power of the officers, by their personal bearing, to prevent familiarities on the part of the crew, and thereby greatly to increase their own influence.

Such provision for the maintenance of discipline on board of the vessels are especially necessary in a port like Gloucester, where the fishermen are of different nationalities and are often men who have been unable to hold their own in other ports on account of their notoriously bad characters. A considerable percentage of the fishermen of Gloucester resemble, more than those of any other American fishing port, the ordinary sailors, though far superior to the average men who compose the crews of merchant and whaling vessels.

SABINE ON DISCIPLINE OF FISHERMEN.—The following words, written by Sabine in 1852, and referring more particularly to the Labrador cod fishery, are none the less applicable at the present time, and to all branches of the fisheries of the United States:

"The selection of a master is a point so important to owners that a word upon his qualifications will not be amiss. Besides all the responsibilities at sea which devolve upon a master in the merchant service, he has cares and anxieties which are unknown to that branch of maritime adventure. His passage being safely made, the master of the merchantman is relieved by the counsel and assistance of the owner or consignee. But it is not so with the master of the fishing vessel. During the period devoted to fishing his labor is arduous in the extreme, and, come what will, in the desolate and distant regions which he visits his own sagacity and prudence are his only reliance. If, as not unfrequently happens, he be so unfortunate as to have among his crew two or three refractory spirits who seek to poison the minds of all the rest; if others, who boasted loudly, before sailing from home, how well and quickly they could use the splitting-knife, or how true and even handed they were in distributing the salt, prove too ignorant to be trusted; or if

every man under his charge, without being dogged or incapable, is still of so leaden a mold as to remain immovable under promises of bounty or promotion, these difficulties must be but new inducements to use extraordinary personal exertions and to preserve his reputation at the expense of his health and strength. *Even if there are none of these embarrassments to contend with, his ordinary employments require an iron frame and an unconquerable resolution.

"A friend who has seldom failed to accomplish what he has undertaken, and whose life has been full of daring enterprises, has often assured me that while on the Labrador shore his duty and the fear of making a 'broken' voyage kept him awake and at his post full twenty hours every day throughout the time employed in taking fish. 'Once,' said he, 'I was deceived by every man that I had on board my vessel, my mate alone excepted. Each shipped, as is usual, to perform a particular service, and each boasted of his accomplishments in catching, dressing down, or salting away; but there was neither a good boatman, an adroit splitter, nor a safe salter among them all. My situation was painful enough. I was interested in the loss or gains of the voyage, and was too poor and too young in command to bear the consequences of returning without a full fare; and, besides, I was never good at accounting for bad luck, and felt that it was far easier for me, even under these untoward circumstances, to fill my vessel than to explain to every one who would question me at home as to the causes of my failure, and the result of the matter was that I got as many fish per ton and per man as any vessel that I met on the coast.' 'Another season,' says the same friend, 'while in the West India trade, I was disappointed in obtaining a carge, and was compelled to go to Labrador or haul my schooner up. I was too restless to be idle and resolved upon fishing. It was three weeks too late, and, on attempting to ship a crew, I found that no good men were to be had, and that I must take raw Irishmen, and a drunkard for a mate.

"'The chances, as you may well suppose, were all against me, but I made the voyage and obtained as many fish as my vessel could carry. But I always had pistols in my pockets, and enforced most of my orders with a threat or a handspike. I slept full dressed, and with arms in my berth. A battle with one or more was almost of daily occurrence, and I was in constant fear either of losing my own life or of being compelled to take that of some one of my crew to overawe the rest.' These incidents occurred on voyages made from a port on the frontiers of Maine, and before the commencement of the temperance reform, and are, of course, to be regarded not only as having been rare in former times but as never happening now. But the master's duty, if he be an efficient man, is never an easy one. If he would provide for every contingency and make sure of a cargo despite of every adverse event, he must not even allow the full repose which nature craves. It is upon his regularity and perseverance in procuring fresh bait, a service which must sometimes be performed at the hazard of his life; upon the frequency of his visits to his boats, which are often miles asunder; upon his readiness to use his own hands to make up the laggard's deficiency; upon his economy and system in the use of time and outfits; upon the degree of energy and regularity which he infuses; and, finally, upon the care which he exercises in dressing and salting the object of his search that the success or failure of the voyage mainly depends. Masters who are able and willing to sustain these varied and incessant calls upon their bedily vigor and mental activity are to be found, probably, in every fishing port. But it is very certain that the number has sensibly diminished during the last twenty years, and that the transfer to other and more profitable and ambitious commands is still going on. The mercantile men of the commercial emporium of the North, and the packet-ships of the commercial emporium of the Union, rank deservedly high; but were their counting-rooms and quarter-decks to yield up all, or even half, of those whose birth-places were on the two capes of Massachusetts, and whose earliest adventures were made in fishing-craft, they would lose many high and honored names. So, too, were either to cease recruiting from the same sources, the humble employment of which I am speaking would speedily become more prosperous, in public estimation more respectable, and of consequence be considered more worthy of the care and protection of our rulers."*

48. NAVIGATION.

NAUTICAL INSTRUMENTS CARRIED.—The best equipped schooners carry the following nautical instruments: (1) A chronometer; (2) a quadrant, octant, or sextant; (3) an aneroid barometer; (4) a spy-glass; (5) a clock; (6) a patent log, and (7) compasses, of which three kinds are used, viz, the wooden, brass, and liquid compasses. Every vessel carries two compasses, usually a wooden and a brass one; the former being used in light weather, the latter in stormy weather. The liquid compass is now often substituted for one of the others; in fact, the liquid compass has come into very general use of late years among the better class of Gloncester vessels.

The use of compasses on board of dories is not unfrequent. Some three or four extra compasses for this purpose are sometimes carried by different members of the crew on a vessel engaged in the off shore fisheries. This practice is not as general as it should be, since these compasses are not furnished by the owners of the vessel, but are purchased by the crew for their personal use. Many men are unable to provide themselves with this very essential safeguard.

The vessels always carry one or more charts, with the parallel ruler and dividers necessary for their proper use, and many of them have a "Manual of Navigation"—commonly known as an Epitome—and a Coast Pilot.

Every sea-going vessel carries two compasses and occasionally an extra one in addition.

A clock is a part of the regular outfit, and there are very few of the larger vessels which do not earry a spy-glass.

Very few vessels go to sea without a barometer. This is the case not only with vessels from Gloucester but also those from other ports, except the small boats engaged in shore fishing. Nearly all the vessels which fish out of sight of land carry either a quadrant, sextant, or octant, the former being most commonly in use, while the latter, by its higher price, is prevented from being so generally adopted, although they are recognized as being better. The chronometer is very rarely carried, except on the vessels engaged in the halibut fishery, and not always on those. The Epitome and Nautical Almanac are necessary on board of vessels which carry a chronometer; but they are sometimes carried by vessels not thus provided.

The charts most popular among the fishermen, and generally in use, are those prepared by Capt. George Eldridge. The Coast Survey and Hydrographic Office charts are also occasionally included in the list. The Admiralty charts of the coast of the British Provinces are used to some extent by vessels fishing in the Gulf of Saint Lawrence, or such as are habitually visiting Provincial ports for bait.

Blunt's "American Coast Pilot" is generally in use; the excellent manual published by the Coast Survey rarely finds its way on board of our vessels.

It is very unusual to find a vessel without an almanac, in which are given, in a convenient form for reference, tide-tables for the important ports along the coast. The Farmer's Almanac, published in Boston, is the favorite among the New England fishermen.

The vessels are fitted out with these instruments in the following manner: The compasses and the clock are a part of the regular outfit of the vessel and are supplied by the owner, as also is generally the spy-glass; but the remainder of the apparatus and the charts are generally owned

by the skipper; the extra compasses for use in the dories, as has already been mentioned, being supplied by different members of the crew.

When a chronometer is used, it is ordinarily hired by the skipper, the erew paying balf and the vessel half. It is insured by its owner, and the cost of insurance charged in the rent, so that if it is lost with the vessel there is no demand for restoration upon those who hired it.

Previous to 1865 few fishing vessels carried a log of any description. Occasionally an old-style "chip-log" was seen on board, but as a rule fishermen estimated their speed by noting alongside how fast the vessel passed through the water—a somewhat unique method of keeping "dead reckoning." It may seem remarkable that anything like accuracy could have been thus attained, but we are assured that many of the old fishermen became exceedingly expert in judging a vessel's speed, and with their knowledge of local currents and the frequent use of the sounding-lead they seldom failed to make good "land-falls."

Some form of patent "harpoon" log is now most commonly used, since these are less expensive than the patent taffrail logs. The liability of the former to injury in shallow water or to loss through sharks biting off the tow-line has of late led to the more general use of the taffrail logs, which are considered the most reliable.

USE OF NAUTICAL INSTRUMENTS.—The manner in which the masters of fishing vessels learn the art of navigation is discussed in another chapter. It is sufficient to remark here that those in charge of the vessels belonging to the Gloucester off-shore fleet are frequently very competent navigators, others, though they may have sufficient knowledge to sail a vessel back and forth, are really not so competent as they should be.

The skippers of mackerel schooners and other vessels which are usually in sight of land have less use for instruments, and rarely, if ever, take observations.

Much of the success of the fishermen, in bringing their vessels into harbor without accident, is due to their habit of taking frequent soundings, and to their intimate knowledge of the shape and character of the bottom along those portions of the coast which they chiefly frequent.